

## **MANE-VU Consultation Appendix**

### **Summary of Consultation between the MANE-VU States**

In early 2007, New Hampshire provided other states in the MANE-VU region with the results of technical analyses that illustrated which states in the region have emissions that are reasonably anticipated to contribute to impairment in one or more of New Hampshire's Class I areas, including Great Gulf Wilderness and Presidential Range - Dry River Wilderness. NHDES sent a letter to these contributing states, inviting them to participate in consultations with New Hampshire and the other Class I states in MANE-VU to discuss ideas on the types and amounts of emissions reductions that are reasonable and, therefore, necessary to achieve reasonable progress in improving visibility at New Hampshire's Class I areas. The consultation calls and meetings that New Hampshire engaged in with our counterparts in the MANE-VU region over this last year served as a platform for comparing technical work and findings, discussing any adjustments that might be appropriate, and developing mutually beneficial solutions.

Representatives from the MANE-VU states have been meeting periodically since 2000 to review technical information and provide their perspectives and direction on the subsequent iterations of the analyses. The MANE-VU states established a more formal consultation process in 2007, beginning with an in-person meeting of the members in Washington, DC on March 1, 2007. At this meeting the states received information on the requirements of the regional haze rule and how to define reasonable progress in Class I areas. The states also discussed potential control options which, if determined to be reasonable, would be considered as part of the Class I states' long term strategy for making reasonable progress toward achieving natural conditions by 2064. This was followed by a second in-person consultation in Providence, RI on June 7, 2007. This second meeting comprised a review of technical analyses completed to date, discussion of a resolution outlining the principles the Class I states would be following in their consultations with contributing states, and examination of a set of statements developed by the Class I states outlining their requests for control measures to be pursued by contributing states, both in the MANE-VU region and outside of it, for the purpose of achieving reasonable progress in the MANE-VU Class I areas .

The MANE-VU Class I states made revisions to the resolution and statements as a result of the discussions that occurred at the June 7<sup>th</sup> meeting. The MANE-VU states then engaged in another consultation via conference call on June 20, 2007 to review the revised documents and vote on them. All member states on the consultation call voted to accept the resolution and statements, with the exception of New York and Vermont, who were unable to participate on the call. The MANE-VU executive staff followed up with both New York and Vermont by phone and email, and received their concurrence on the documents as well. Via the statement, the MANE-VU member states agreed to a course of action that includes pursuing the adoption and implementation of the following emission management strategies, as appropriate and necessary:

- timely implementation of BART requirements; and
- a low sulfur fuel oil strategy in the inner zone States (New Jersey, New York, Delaware and Pennsylvania, or portions thereof) to reduce the sulfur content of: distillate oil to 0.05% sulfur by weight (500 ppm) by no later than 2012, of #4 residual oil to 0.25% sulfur by weight by no later than 2012, of #6 residual oil to 0.3 – 0.5% sulfur by weight by no later than 2012, and to further reduce the sulfur content of distillate oil to 15 ppm by 2016; and

- a low sulfur fuel oil strategy in the outer zone States (the remainder of the MANE-VU region) to reduce the sulfur content of distillate oil to 0.05% sulfur by weight (500 ppm) by no later than 2014, of #4 residual oil to 0.25 – 0.5% sulfur by weight by no later than 2018, and of #6 residual oil to no greater than 0.5 % sulfur by weight by no later than 2018, and to further reduce the sulfur content of distillate oil to 15 ppm by 2018, depending on supply availability; and
- a 90% or greater reduction in sulfur dioxide (SO<sub>2</sub>) emissions from each of the electric generating unit (EGU) stacks identified by MANE-VU (Attachment 1- comprising a total of 167 stacks – dated June 20, 2007) as reasonably anticipated to cause or contribute to impairment of visibility in each mandatory Class I Federal area in the MANE-VU region. If it is infeasible to achieve that level of reduction from a unit, alternative measures will be pursued in such State; and
- continued evaluation of other control measures including energy efficiency, alternative clean fuels, and other measures to reduce SO<sub>2</sub> and nitrogen oxide (NO<sub>x</sub>) emissions from all coal-burning facilities by 2018 and new source performance standards for wood combustion. These measures and other measures identified will be evaluated during the consultation process to determine if they are reasonable and cost-effective.

In addition, the long-term strategy accepted by the MANE-VU states to reduce and prevent regional haze allows each state up to 10 years to pursue adoption and implementation of reasonable and cost-effective NO<sub>x</sub> and SO<sub>2</sub> controls.

Through the MANE-VU states' acceptance of the emission management strategies outlined in the statements on the June 20<sup>th</sup> call, they confirmed the set of actions the MANE-VU states will pursue in their state implementation plans (SIPs) to provide reasonable progress toward improved visibility by 2018, the first milestone in meeting the long-term regional haze goals for each Class I area. The MANE-VU Air Directors also consulted on issues concerning the emission management strategies outlined in the statements on three subsequent conference calls. During the September 26, 2007 call, participants discussed how to interpret the emission management strategies in the statements for purposes of estimating visibility impacts via air quality modeling. On February 28, 2008 the MANE-VU states received the results of the final 2018 modeling runs. Finally, on the March 21, 2008 call the states discussed the process for establishing reasonable progress goals for the MANE-VU Class I areas.

Summaries of the individual meetings and calls referenced above follow, along with copies of the final resolution and statements accepted by the MANE-VU member states.

Listing of consultation summary documentation:

1. Intra-MANE-VU Consultation Meeting Summary, March, 1, 2007, Washington, DC
2. Intra-MANE-VU Consultation Meeting Summary, June 7, 2007, Washington, DC
3. Intra-MANE-VU Consultation Conference Call Summary, June 20, 2007
4. Intra-MANE-VU Consultation Conference Call Summary, MANE-VU Air Directors, March 31, 2008
5. Resolution of the Commissioners of States with Mandatory Class I Federal Areas Within the Mid-Atlantic Northeast Visibility Union (MANE-VU) Regarding Principles for Implementing the Regional Haze Rule, adopted June 20, 2007

6. Statement 1: Statement of the Mid-Atlantic/Northeast Visibility Union (MANE-VU) Concerning a Course of Action Within MANE-VU Toward Assuring Reasonable Progress, adopted June 20, 2007
7. Statement 2: Statement of the Mid-Atlantic/Northeast Visibility Union (MANE-VU) Concerning a Request for a Course of Action by States Outside of MANE-VU Toward Assuring Reasonable Progress, adopted June 20, 2007
8. Statement 3: Statement of the Mid-Atlantic/Northeast Visibility Union (MANE-VU) Concerning a Request for a Course of Action by the U.S. Environmental Protection Agency (EPA) Toward Assuring Reasonable Progress, adopted June 20, 2007
9. Attachment to Statements 1 and 2: List of 167 EGU stacks, dated June 20, 2007

**Intra-MANE-VU Consultation Meeting Summary**  
**March 1, 2007**  
**Washington DC**

**Introduction**

The Mid-Atlantic/Northeast Visibility Union (MANE-VU) held an in-person consultation meeting of the region's states on March 1, 2007 in Washington DC. The purpose of the consultation meeting was to fulfill the requirements of 40 CFR 51.308(d)(1)(B)(iv) and (3)(i) for Class I states to consult with contributing states on developing reasonable progress goals for the region's seven mandatory federal Class I areas, and for all contributing states to consult on the development of coordinated emission management strategies. All MANE-VU states were invited to participate along with the region's Federal Land Managers (FLMs) from the National Park Service, Fish & Wildlife Service, and Forest Service, and the Environmental Protection Agency (EPA) regional representatives from Regions I, II, and III.

Topics discussed included:

- 1) An overview of the regional haze program's goals and requirements;
- 2) A review of the uniform progress glidepaths and anticipated status of visibility impairment in 2018 in the seven MANE-VU mandatory federal Class I areas; and
- 3) A review of an analysis based on the Clean Air Act's statutory factors of what controls may be considered reasonable, and 4) Discussions of reasonable control options by source sector.

**Key Outcomes of the Consultation**

- As an overriding principle, MANE-VU looks for equivalent reductions, not equal reductions across source categories.
- A low-sulfur fuel oil strategy is viable as a MANE-VU 2018 control measure, at a 500 ppm sulfur limit in the near-term, and a 15 ppm goal for distillate in 2018.
- Sulfur limits on #4 and #6 fuel oil require more analysis, and oil-fired EGUs with scrubbers will need flexibility.
- The ICI boiler sector needs further analysis as to what controls may be reasonable, especially from small and medium-sized boilers.
- If it is reasonable for MANE-VU to achieve a 40% sulfur reduction in the non-EGU sector, it may also be reasonable that contributing states in other RPOs could find equivalent reasonable reductions.
- There was no real consensus on controls on residential wood / open burning as a regional strategy, as what can be achieved in these sectors varies widely from state to state.
- MANE-VU Class I states will conduct a series of separate phone calls to develop a proposal for moving forward on consultations and developing reasonable control options.
- The MANE-VU states agreed to keep working towards implementing reasonable regional controls, which would be discussed at the next MANE-VU consultation meeting in June 2007.

## **Attendees**

### **States and Tribes:**

Maine (Class I state) – David Littell, Jeff Crawford  
New Hampshire (Class I state) – Jeff Underhill  
New Jersey (Class I state) – Lisa Jackson, Nancy Wittenberg, Chris Salmi  
Vermont (Class I state) – Justin Johnson, Dick Valentinetti, Paul Wishinski  
Connecticut – Anne Gobin  
Delaware – Ali Mirzakhali  
District of Columbia – Diedre Elvis-Peterson, Abraham Hagos  
Maryland – Tad Aburn  
Massachusetts – Arleen O'Donnell, Barbara Kwetz  
Pennsylvania – Tom Fidler, Joyce Epps, Wick Havens  
New York – Dave Shaw, Rob Sliwinski

### **Federal Land Management Agencies and EPA Regional Offices:**

National Park Service – Bruce Polkowsky, John Bunyak  
Forest Service – Anne Mebane, Anne Acheson, Andrea Stacey  
Fish and Wildlife Service – Sandra Silva, Tim Allen  
EPA Region I – Anne Arnold  
EPA Region III – Makeba Morris, Neil Bigioni

## **Welcome and Introductory Remarks**

David Littell, MANE-VU Vice-Chair and Commissioner of Maine's Department of Environmental Protection, opened the consultation with a welcome and introductions around the room. Mr. Littell followed with a presentation entitled "Bringing Clear Views to Acadia National Park and Other Class I Areas." Acadia National Park is one of three mandatory Class I areas in Maine while New Hampshire has two, and Vermont and New Jersey each have one. Mr. Littell noted that annual visitation at Acadia is over 2 million visits a year leading to visitor spending of more than \$127 million in 2005, and surveys indicate that a clear vista is a strong factor in a visitor's positive experience at the park.

Mr. Littell then provided an overview of the goals for today's consultation, including:

- Review requirements, resources and critical timing issues to ensure all share a common understanding;
- Discuss options for control measures to identify what is reasonable in MANE-VU;
- Identify impediments to implementing control measures and discuss how to address them;
- Identify links between haze, PM, and ozone strategies that help define what's reasonable;
  
- Define reasonable progress for MANE-VU Class I Areas in terms of control measure options; and
- Summarize points of agreement and identify issues for follow-up consultation.

## **Overview of MANE-VU Consultation**

Anna Garcia, MANE-VU Deputy Director, followed with a presentation entitled "Timing, Contribution, and Consultation." Noting that multiple methods show consistent conclusions about which states are top contributors and that a single MANE-VU consulting group offers the best opportunity to engage contributing states in a meaningful consultation process, Ms. Garcia emphasized that the MANE-VU

states need to make sure we know what we are asking of the states within MANE-VU before consulting with contributing states outside of MANE-VU. Today's consultation is the first formal intra-MANE-VU consultation being held to develop MANE-VU's "clean hands" position and to start the process of determining reasonable control measures by MANE-VU states for the December 2007 Regional Haze State Implementation Plan (SIP) submissions.

### **MANE-VU Regional Haze Goals**

Paul Wishinski from Vermont's Department of Environmental Conservation followed with a presentation entitled "Overview of Program Requirements for the Regional Haze Rule." Under the regional haze regulations, both the reasonable progress goals to be set by the Class I states and the long-term coordinated emissions strategies to meet the reasonable progress goals require consultations with contributing states and the Federal Land Managers (FLMs). Mr. Wishinski concluded, as did Ms. Garcia before, that the key next step is for the MANE-VU states to agree on what they believe are reasonable control measures for visibility improvement at the MANE-VU Class I areas.

Jeff Underhill from New Hampshire's Department of Environmental Services followed with a presentation entitled "Status of Visibility at MANE-VU Class I sites and Modeling for the Regional Haze Rule." Based on modeling results, Mr. Underhill concludes that all of MANE-VU's seven mandatory Class I areas will likely be below the uniform progress line in 2018 with "on-the-books" controls plus 500 ppm maximum sulfur limit for #2 distillate, except in Delaware and Vermont. However, more progress can be made through additional reasonable measures, and the Regional Haze Rule requires us to consider these measures via the consultation process with contributing states.

### **Developing Reasonable Progress for MANE-VU Class I Areas**

Art Werner of MACTEC Federal Programs, Inc., MANE-VU's contractor for the four-factor reasonable progress project, followed with a presentation on the preliminary results of that project. Mr. Werner reviewed the four factors that need to be analyzed to determine which emission control measures are needed to make reasonable progress in improving visibility: 1) the costs of compliance, 2) the time necessary for compliance, 3) energy and nonair quality environmental impacts of compliance, and 4) the remaining useful life of any source subject to such requirements. Mr. Werner also presented a preliminary marginal cost figure of \$1,390/ton (1999\$) of SO<sub>2</sub> in 2018 from a recent MANE-VU-sponsored IPM run for a "CAIR Plus" policy. The final report due in May will provide a methodology for addressing reasonable progress and inform the MANE-VU states on control measure costs for both priority source categories and selected individual sources for upcoming consultations on setting the reasonable progress goals for the MANE-VU mandatory Class I areas.

### **Assessing Control Options**

The final presentation by Chris Salmi with New Jersey's Department of Environmental Protection entitled "Reasonable Measure Opportunities" emphasized that the MANE-VU Class I states intend to focus their reduction efforts for the 2018 milestone on sulfur dioxide reductions since they cause, on average, nearly 80% of the visibility impairment on the 20% worst days. Mr. Salmi presented recent control measure analyses showing that MANE-VU sources can reasonably achieve over 200,000 tons of SO<sub>2</sub> reductions in 2018 from non-EGU control measures, primarily from ICI coal and oil-fired sources, a

low-sulfur distillate strategy, and controls on Best Available Retrofit Technology (BART) sources. Mr. Salmi concluded his presentation by posing two questions for the members:

- 1) What measures does MANE-VU consider reasonable for 2018?, and
- 2) What measures do we ask others to implement?

The questions began a roundtable discussion initiated by Ms. Garcia's intentionally broad question to the members asking what is reasonable.

### **Summary of Discussion**

NESCAUM suggested, and New Hampshire agreed that as an overriding principle what MANE-VU is looking for is equivalent reductions, not equal reductions across source categories. The discussion segued to what MANE-VU can reasonably accomplish for a low-sulfur fuel oil strategy. The members agreed that this is a prime example of a source category where MANE-VU can make reasonable reductions due the widespread use of distillate for residential and commercial heating. Other states primarily outside of MANE-VU do not have a similar reliance on fuel oil for heating, so they could make equivalent reasonable reductions from other source categories to match MANE-VU's heating oil sulfur reductions.

Further discussion continued with respect to two potentially reasonable fuel-oil strategies for the MANE-VU region, dubbed S1 and S2:

- S1 is less stringent and envisions a 75% reduction in sulfur content to 500 ppm by 2018 for home heating / distillate, and 50% reductions in sulfur content for #4 and #6 fuel oils.
- S2 envisions a 99.25% reduction in sulfur content to 15 ppm by 2018 for home heating / distillate, and the same 50% reductions for #4 and #6 as in S1.

New Hampshire suggested the need to move carefully due to the concerns about price and supply issues. Vermont countered that there is a 10-year timeframe to accomplish a low-sulfur fuel oil strategy. Pennsylvania suggested that a 500 ppm strategy is reasonable, but timing is important. Vermont added that the Northeast states have been discussing low-sulfur fuel oil strategies for ten years already, and that two or three states such as New York, New Jersey, and Connecticut need to go first and pass regulations to catalyze regional negotiations with industry. New Jersey noted that New Jersey has started their rulemaking process on low-sulfur fuel oil; New York added that New York has started their rulemaking process for 500 ppm for distillate by 2018. Connecticut said that Connecticut's fuel standards are set by statute, and the statute precludes Connecticut from lowering its fuel-oil standards until neighboring states Massachusetts and Rhode Island do so as well, presumably for regional supply reasons.

Continuing the low-sulfur fuel oil discussion, Pennsylvania asked if EPA has been approached on a national low-sulfur fuel oil strategy. New Jersey replied that EPA is not focusing on this area, leaving it to the states. NESCAUM added that the industry believes that part of the deal with EPA for accomplishing the 15 ppm on-road ultra low-sulfur diesel (ULSD) standard is that there will be no more sulfur reductions expected. MANE-VU noted that in recent discussions, the industry suggested it was possible to achieve a 15 ppm sulfur level for distillate within a 2014 timeframe. Massachusetts said that it may be difficult for Massachusetts to commit to a 15 ppm sulfur level in distillate by 2018, noting, however, that the positive co-benefits of greater furnace efficiency and therefore lower GHG emissions

might help in instituting a 15 ppm sulfur level in distillate regulation. New Jersey emphasized that we have a decade to accomplish a 15 ppm sulfur standard for distillate.

MANE-VU asked the group about what might work in terms of lower sulfur limits in #4 and #6 fuel oils. Pennsylvania said that Pennsylvania has various sulfur limits and they would need more time to analyze such limits. New Jersey noted that these low-sulfur fuels are already available as some New Jersey counties are already below 5000 ppm sulfur. Maine questioned what limits on #6 fuel oil would mean for those oil-fired EGUs that have scrubbers.

MANE-VU wrapped up the low-sulfur fuel-oil discussion asking the group if the S1 strategy was viable as a MANE-VU 2018 region haze control measure. The consensus was that a 500 ppm sulfur limit “near-term” and a 15 ppm “goal” for distillate in 2018 is viable. For #4 / #6 sulfur limits, the consensus was that more work needs to be done, and that flexibility should be provided to states that have scrubbers on their oil-fired EGUs.

The consultation moved on to sulfur reductions from the coal-fired ICI (Industrial, Institutional, and Commercial) sector and whether MANE-VU can include such reductions in a non-EGU strategy bundle at this time. Pennsylvania suggested that controls for small-to-medium size boilers (<100 MM Btu / hour heat input) may not be cost-effective, adding that a 50% reduction in sulfur emissions from coal-fired ICI sources may overestimate what can realistically be achieved. New Hampshire suggested that recent analysis by New Hampshire staff on installation costs should be considered. Maine added that this sector may be a viable source for other RPO states to achieve reasonable sulfur reductions from their non-EGU sectors that are equivalent to the 40% sulfur reductions expected from non-EGU sources within MANE-VU due to the low-sulfur fuel oil strategy.

The consensus concerning sulfur reductions from the coal-fired ICI sector was that there is a need for more analysis to determine what is reasonable to obtain sulfur reductions from small and medium-sized coal-fired boilers. There was also consensus that if MANE-VU achieves overall reasonable sulfur reductions in the 40% range from the non-EGU sector, then other RPOs could find equivalent reasonable reductions.

Discussions moved on to other potential regional haze control measures within MANE-VU. For lime and cement kilns, both Pennsylvania and New York agreed that there is wide variability in these sources. Pennsylvania suggested that lime kiln controls are not cost-effective, and that an EPA global settlement on cement kilns was coming soon anyway. New York added that they will be regulating its three cement kilns as BART sources.

For the residential wood combustion / open burning source category, there was general consensus on including outdoor wood boilers in this category. New Jersey encouraged greater use wood stove changeout programs. New Hampshire replied that what can be done on wood combustion varies from state to state, and, for example, in New Hampshire new wood stove standards would be acceptable, but not changeout programs. New York added that open burning bans are unenforceable, especially in rural areas. There was little consensus on control measures in this source category, especially considering that the primary pollutants of concern are organic carbon and direct particulate matter, and not sulfur which is the primary regional haze pollutant within MANE-VU for the first planning milestone in 2018.

The Intra-MANE-VU Consultation Meeting adjourned.



**Intra-MANE-VU Consultation Meeting**  
**June 7, 2007**  
**Providence, Rhode Island**

**Introduction**

The Mid-Atlantic/Northeast Visibility Union (MANE-VU) held an in-person consultation meeting of the region's states on June 7, 2007 in Washington DC. The purpose of the consultation meeting was to fulfill the requirements of 40 CFR 51.308(d)(1)(B)(iv) and (3)(i) for Class I states to consult with contributing states on developing reasonable progress goals for the region's seven mandatory federal Class I areas, and for all contributing states to consult on the development of coordinated emission management strategies. All MANE-VU states were invited to participate along with the region's Federal Land Managers (FLMs) from the National Park Service, Fish & Wildlife Service, and Forest Service, and the Environmental Protection Agency (EPA) regional representatives from Regions I, II, and III.

Topics discussed included: 1) the process for setting reasonable progress goals by the MANE-VU Class I states; 2) an approach for intra-MANE-VU consultation including control strategy development within MANE-VU for setting the reasonable progress goals; 3) an approach for consulting with states outside of MANE-VU on the reasonable progress goals to be established by the MANE-VU Class I states; and 4) the next steps in the consultation process.

**Key Outcomes of the Consultation**

- All of the MANE-VU states agreed that a resolution setting out the principles by which the Class I states will implement the regional haze rule should go to the MANE-VU Board for approval, although the document was to be signed only by the MANE-VU Class I states.
- Two separate draft statements on courses of action by states within and outside MANE-VU for assuring progress towards the MANE-VU Class I States' reasonable progress goals were tabled until a corrected list of 167 EGU stacks impacting visibility in the MANE-VU Class I areas could be generated. The MANE-VU states agreed that they would vote by conference call once the corrected 167 EGU stack list became available.

**Attendees**

**States:**

Maine (Class 1 state) – David Littell  
New Hampshire (Class 1 state) – Bob Scott, Jeff Underhill  
Vermont (Class 1 state) – Justin Johnson, Dick Valentinetti  
New Jersey (Class 1 state) – Lisa Jackson, Nancy Wittenberg, Chris Salmi  
Connecticut – Dave Wackter  
Delaware – Ali Mirzakilili  
District of Columbia – Cecily Beall  
Massachusetts – Arleen O'Donnell, Barbara Kwetz  
Maryland – Tad Aburn  
New York – Dave Shaw  
Pennsylvania – Tom Fidler, Joyce Epps, Wick Havens  
Rhode Island – Michael Sullivan, Steve Majkut

**Federal Land Management Agencies and EPA Regional Offices:**

National Park Service – Bruce Polkowsky (in person), Holly Salazar (on phone)

Fish & Wildlife Service – Tim Allen (on phone)

Forest Service – Ann Mebane, Ann Acheson (on phone)

EPA Region III (on phone)

**Welcome and Introductions**

David Littell, MANE-VU Vice-Chair and Commissioner of Maine’s Department of Environmental Protection, opened the consultation with a welcome and introductions around the room, including those on the phone. Anna Garcia, MANE-VU Deputy Director, followed with a brief outline of the goals for the consultation, including an update on recent technical work and discussions of the proposed MANE-VU Class I states resolution on consultation principles, a proposed statement on control measures within the MANE-VU region for achieving reasonable progress goals, and a proposed statement on controls outside of the MANE-VU region for achieving reasonable progress goals.

**Status of Technical and Policy Work Issues**

Gary Kleiman, NESCAUM, led this session with an update of the recent technical work, including preliminary modeling results. All seven of the MANE-VU Class I areas will be below the uniform rate of progress in 2018 according to preliminary modeling results. Tad Aburn, Maryland, asked the Federal Land Managers (FLMs) if the MANE-VU technical approach is satisfactory. Bruce Polkowsky, National Park Service, replied that the other eastern RPOs are doing similar work and achieving better than uniform progress but have different approaches to reasonable progress. Tim Allen, Fish and Wildlife Service, commented that MANE-VU is not taking as much of a chemistry-intensive approach as other RPOs, and MANE-VU will likely need to address nitrates and organics in the next regional haze planning phase after 2018. Mr. Allen added that he is very supportive of obtaining as many reductions as possible now as they will only be more difficult to obtain later.

Chris Salmi, New Jersey Department of Environmental Protection, followed with a presentation on MANE-VU’s approach to fulfilling the regional haze rule’s reasonable progress requirement. The statutory four-factor analysis for control strategies for visibility-impairing source sectors provides the central focus for the Class I states’ determination of what is reasonable. Finally, Anna Garcia ended the session with a brief presentation on the process by which MANE-VU chose the regional source sectors that were included in the four-factor analysis.

**Roundtable Discussions**

The MANE-VU states began their consultation with a roundtable discussion of the draft resolution by the MANE-VU Class I states on principles for implementing the regional haze rule, including the requirement for consulting with contributing states on reasonable progress. After minor wording changes, the states then agreed to seek Board approval although the resolution would be signed only by the MANE-VU Class I states.

Roundtable discussions ensued on the two proposed statements, one on control strategies within the MANE-VU states for assuring reasonable progress, and the other for states outside MANE-VU. When it became clear that more work needed to be done so all states were comfortable with the final list of 167

EGU stacks having the greatest visibility impact on the MANE-VU Class I areas, the states agreed to postpone voting on the statements until a later date by conference call.

A final discussion on a draft statement on requesting further action by the U.S. Environmental Protection Agency (EPA) on tightening the CAIR program for assuring reasonable progress also occurred. The states also agreed to table a vote on this statement until a conference call.

### **Consultation Next Steps**

A brief discussion on next consultation steps, especially with the Regional Planning Organizations outside of MANE-VU also occurred. Those steps include:

- Consulting within and outside MANE-VU about which control strategies are reasonable;
- Deciding how to include the strategies in the final statements in modeling;
- Determining goals based on final modeling;
- Pursuing the adoption of enforceable emissions limits & compliance schedules; and
- Evaluating progress in 5 years.

## **Intra- MANE-VU Consultation Conference Call Summary June 20, 2007**

### **Introduction**

On June 20, 2007 the MANE-VU Commissioners and Air Directors participated on a conference call to continue consultation discussions on emission management strategies for the region to pursue to achieve reasonable progress toward natural conditions in the region's Class I areas. The MANE-VU state Members completed their review of a resolution and three statements proposed by the Class I states to the larger MANE-VU membership, and voted to accept these documents and confirm the set of actions the MANE-VU states will pursue in their state implementation plans (SIPs) to provide reasonable progress toward improved visibility by 2018, the first milestone in meeting the Class I areas' long-term regional haze goals.

### **Attendees**

#### **States, Tribes and MSOs:**

Maine (Class 1 state) – David Littell, Jeff Crawford  
New Hampshire (Class 1 state) – Jeff Underhill, Andy Bodnarik  
New Jersey (Class 1 state) – Chris Salmi  
Connecticut – Anne Gobin  
Delaware – Ali Mirzakilili  
District of Columbia – Cecily Beall  
Massachusetts – Barbara Kwetz  
Maryland – Tad Aburn, Andy Hiltebridle  
New York – Dave Shaw  
Pennsylvania – Tom Fidler, Joyce Epps, Wick Havens  
Penobscot Tribe – John Banks, Bill Thompson  
Rhode Island – Steve Majkut  
NESAUM – Arthur Marin, Gary Kleiman

### **Consultation Discussions**

The MANE-VU states voted on and passed three statements, which are attached to this summary, with some minor changes. The three statements are entitled as follows:

1. Statement of the Mid-Atlantic/Northeast Visibility Union (MANE-VU) Concerning a Course of Action Within MANE-VU Toward Assuring Reasonable Progress;
2. Statement of the mid-Atlantic/Northeast Visibility Union (MANE-VU) Concerning a Request for a Course of Action by States Outside of MANE-VU Toward Assuring Reasonable Progress; and
3. Statement of the Mid-Atlantic / Northeast Visibility Union (MANE-VU) Concerning a Request for a Course of Action by the U.S. Environmental Protection Agency (EPA) Toward Assuring Reasonable Progress.

The final versions of the statements which were accepted via the vote reflect the following changes:

- agreement on the list of EGU stacks, which is attached to both Statement 1 and 2, and revising the table to remove columns listing plant type, SO2 tons per year and rank, and changing the bottom notes accordingly (see explanation below);
- removal of the phrase "top 100" from the 4th action bullet on Statement 1 and the 2nd action bullet on Statement 2 (regarding 90% reduction from EGUs);
- correction of the date for 500 ppm low sulfur fuel oil to "by no later than 2012" (I made the error of changing that date to "2014" in translating the Consultation comments - it should be 2012 as for the other inner zone fuel requirements);
- revision of the last paragraph in Statement 3 to delete "beyond 2018 CAIR levels" and replace it with "by no later than 2018"; and
- a change in the signature line on all three statements to "Adopted by the MANE-VU States and Tribes on (date)."

In addition, the members agreed to keep the columns that were deleted from the abbreviated "167 stacks" table as part of the larger spreadsheet of the 167 stacks that MARAMA produced and to make that document part of a technical support document to Statements 1 and 2. The columns were deleted to keep the table simple and to reduce confusion about tons per year information used in the modeling vs. tons per year information in the Acid Rain Database, in which there are some differences. Attachment 1 to the Statements refers to the 2002 tons per year information from the MANE-VU Contribution Assessment at the bottom of the table.

The MANE-VU states also confirmed that, if it is infeasible for the oil/gas units that are in New Hampshire and Maine to meet the 90% reduction for EGUs, meeting the low sulfur fuel oil requirements would be sufficient. In addition, the MANE-VU states will also credit early state actions (within a few years prior to 2002) toward the 90% target of reducing emissions from EGUs on the "167 stack" list.

The group also decided that the technical support document for the statements and the consultation summaries would be circulated to the MANE-VU states for their review and comment, and to get any further corrections to the more comprehensive table of 167 stacks (some states had changes to the plant types on the list).

#### Voting on the Statements

At the end of the call the states voted on whether they would accept each of the statement. For Statement 1, New Jersey moved that the statement be put up for a vote and Pennsylvania seconded the motion. All MANE-VU states on the call voted to accept Statement 1. On Statement 2, the Penobscot Tribe moved that it be considered for a vote and Massachusetts seconded the motion. Once again, all MANE-VU states on the call voted to accept Statement 2. Finally, for Statement 3, the Penobscot Tribe moved that it be considered for a vote and New Jersey seconded the motion. All MANE-VU states on the call voted to accept Statement 3.

New York and Vermont were unable to participate on the consultation conference call, so to ensure that all the MANE-VU member states are in agreement on these actions, the MANE-VU executive staff proposed to contact each state individual by phone and email to get their response to the vote on the statements. Within one day of the consultation conference call, the MANE-VU executive staff briefed New York and Vermont by phone and email and received their confirmation that they accepted all three statements as revised on the call.

## **Intra-MANE-VU Consultation – March 31, 2008 – MANE-VU Air Directors' Call**

### **States Attending the Consultation**

Maine (Class I state) – Jeff Crawford  
New Hampshire (Class I state) – Jeff Underhill, Andy Bodnarik  
New Jersey (Class I state) – Chris Salmi, Stella Oluwasuen-Apo, Peg Gardner  
Connecticut – Dave Wackter  
Delaware – Jack Sipple  
District of Columbia – Cecily Beall  
Maryland – Roger Thunell, Brian Hug  
Massachusetts – Glenn Keith  
New York – Gopal Sistla, Rob Sliwinski  
Pennsylvania – Joyce Epps

Representatives of MANE-VU member states met via conference call on March 31, 2008.

During the call, NESCAUM modeling assumptions and results were reviewed, and the three Class I states present (Maine, New Hampshire, and New Jersey) confirmed that they would be relying on the results of that modeling to set their reasonable progress targets. The targets based on the modeling were included in the MANE-VU SIP Template draft that is posted on the MARAMA web site and will be sent to EPA for review. (Note: sent on 4/2/08)

Ms. Garcia agreed to share the results of the MANE-VU modeling with Virginia and West Virginia before the Stakeholder meeting on Friday, April 4.

Maine, New Hampshire, Vermont, and Massachusetts had met with oil companies and distributors concerning the MANE-VU low sulfur oil strategy. Stakeholders had expressed some concern about the 0.5% limit for residual oil, but states wanted to gather more information before deciding whether to make any changes in the MANE-VU strategy.

Participating states reviewed choices concerning the Long Term Strategy section of the SIP Template, and it was agreed that a document describing those choices would be revised and discussed further with EPA and FLM agency representatives. Individual MANE-VU states might make different choices with respect to language in their SIPs, and some gave indications of their preferences.